ABSTRACT

PACKET AGGREGATION FOR REAL TIME SERVICES ON PACKET DATA NETWORKS

A method and equipment is used to transmit and/or receive time delay-intolerant information over a communication system. The information is transmitted in aggregated form. A plurality of packets representing time delay-intolerant information is combined to form an aggregate packet. The aggregate packet is formed based on user service requirements while maintaining time delay requirements of the information. The size of the aggregated is formed from a negotiation between the transmitting equipment and receiving equipment. Because of the use of an aggregated packet less scheduling of packets is done and the aggregated packet can be transmitted at a rate different than the fixed rate of the time delay-intolerant information. The equipment comprises transmit equipment and receive equipment. The transmit equipment contains an aggregator that combines a plurality of packets based on user service requirements. The packets to be transmitted are retrieved at the fixed rate of the time delay-intolerant information. The size of the aggregate packet can be determined on a static or dynamic basis. The receiving equipment contains a de-aggregator circuit that receives aggregated packets and generates individual packets from the received aggregated packet. The generated individual packets are retrieved from the de-aggregator at the fixed rate of the time delay-intolerant information.